

## WEST

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## Search Results -

| Terms   | Documents |
|---|-----------|
| flavanone-7-O-glucoside-2-O-rhamnosyl-transferase | 0         |

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 US Pre-Grant Publication Full-Text Database  
 JPO Abstracts Database  
 EPO Abstracts Database  
 Derwent World Patents Index

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L5

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## Search History

DATE: Thursday, November 21, 2002 [Printable Copy](#) [Create Case](#)

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DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=OR

|           |   |    |           |
|-----------|---|----|-----------|
| <u>L5</u> | flavanone-7-O-glucoside-2-O-rhamnosyl-transferase | 0  | <u>L5</u> |
| <u>L4</u> | flavanone near5 rhamnosyl adj transferase         | 0  | <u>L4</u> |
| <u>L3</u> | L2 and flavanone                                  | 5  | <u>L3</u> |
| <u>L2</u> | L1 and plant                                      | 8  | <u>L2</u> |
| <u>L1</u> | rhamnosyl adj transferase                         | 12 | <u>L1</u> |

END OF SEARCH HISTORY

NEWS 19 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)  
now available on STN

NEWS 20 Aug 19 IFIPAT, IFICDB, and IFIUDB have been reloaded

NEWS 21 Aug 19 The MEDLINE file segment of TOXCENTER has been reloaded

NEWS 22 Aug 26 Sequence searching in REGISTRY enhanced

NEWS 23 Sep 03 JAPIO has been reloaded and enhanced

NEWS 24 Sep 16 Experimental properties added to the REGISTRY file

NEWS 25 Sep 16 Indexing added to some pre-1967 records in CA/CAPLUS

NEWS 26 Sep 16 CA Section Thesaurus available in CAPLUS and CA

NEWS 27 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985

NEWS 28 Oct 21 EVENTLINE has been reloaded

NEWS 29 Oct 24 BEILSTEIN adds new search fields

NEWS 30 Oct 24 Nutraceuticals International (NUTRACEUT) now available on STN

NEWS 31 Oct 25 MEDLINE SDI run of October 8, 2002

NEWS 32 Nov 18 DKILIT has been renamed APOLLIT

NEWS EXPRESS October 14 CURRENT WINDOWS VERSION IS V6.01,  
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),  
AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002

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FILE 'AGRICOLA' ENTERED AT 18:53:40 ON 21 NOV 2002

FILE 'BIOSIS' ENTERED AT 18:53:40 ON 21 NOV 2002  
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FILE 'EMBASE' ENTERED AT 18:53:40 ON 21 NOV 2002  
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=> s lactobacillus and rhamnosyl(w)transferase  
L1 1 LACTOBACILLUS AND RHAMNOSYL(W) TRANSFERASE

=> d 11 1

L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS  
AN 2000:513780 CAPLUS  
DN 133:130794  
TI Protein and cDNA sequences of \*\*\*rhamnosyl\*\*\* \*\*\*transferase\*\*\*  
gene and uses thereof  
IN Gressel, Jonathan; Eyal, Yoram; Fluhr, Robert  
PA Yeda Research and Development Co. Ltd., Israel; State of Israel - Ministry  
of Agriculture  
SO PCT Int. Appl., 48 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

|                     | PATENT NO.    | KIND  | DATE     | APPLICATION NO. | DATE     |
|---------------------|---------------|---|----------|-----------------|----------|
| PI                  | WO 2000043490 | A2  | 20000727 | WO 2000-IL38    | 20000120 |
|                     | WO 2000043490 | A3  | 20000928 |                 |          |
|                     | W:            | AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,<br>CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,<br>IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,<br>MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,<br>SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,<br>AZ, BY, KG, KZ, MD, RU, TJ, TM |          |                 |          |
|                     | RW:           | GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,<br>DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,<br>CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  |          |                 |          |
| PRAI IL 1999-128193 | A             | 19990122  |          |                 |          |

=> s rhamnosyl(w)transferase and saccharomyces  
L2 1 RHAMNOSYL(W) TRANSFERASE AND SACCHAROMYCES

=> d 12 1

L2 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS  
AN 2000:513780 CAPLUS  
DN 133:130794  
TI Protein and cDNA sequences of \*\*\*rhamnosyl\*\*\* \*\*\*transferase\*\*\*  
gene and uses thereof  
IN Gressel, Jonathan; Eyal, Yoram; Fluhr, Robert  
PA Yeda Research and Development Co. Ltd., Israel; State of Israel - Ministry  
of Agriculture  
SO PCT Int. Appl., 48 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

|    | PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|----|---------------|------|----------|-----------------|----------|
| PI | WO 2000043490 | A2   | 20000727 | WO 2000-IL38    | 20000120 |

WO 2000043490 A3 20000928

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI IL 1999-128193 A 19990122

=> s rhamnosyl(w)transferase and microorganism

L3 6 RHAMNOSYL(W) TRANSFERASE AND MICROORGANISM

=> duplicate remove 13

DUPLICATE PREFERENCE IS 'BIOSIS, CAPLUS'

KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n

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L4 6 DUPLICATE REMOVE L3 (0 DUPLICATES REMOVED)

=> d 14 1-6 ti

L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2002 ACS

TI Protein and cDNA sequences of \*\*\*rhamnosyl\*\*\* \*\*\*transferase\*\*\* gene and uses thereof

L4 ANSWER 2 OF 6 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

TI Cloning and functional characterization of a 30 kb gene locus required for lipopolysaccharide biosynthesis in *Legionella pneumophila*.

L4 ANSWER 3 OF 6 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

TI Selection and partial characterization of a *Pseudomonas aeruginosa* mono-rhamnolipid deficient mutant.

L4 ANSWER 4 OF 6 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

TI Three novel \*\*\*rhamnosyl\*\*\* \*\*\*transferases\*\*\* involved in the assembly of *Pseudomonas aeruginosa* A-band polysaccharide.

L4 ANSWER 5 OF 6 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

TI Glycosyl transferases of O-antigen biosynthesis in *Salmonella enterica*: Identification and characterization of transferase genes of groups B, C2, and E1.

L4 ANSWER 6 OF 6 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

TI The *Escherichia coli* K-12 "wild types" W3110 and MG1655 have an rph frameshift mutation that leads to pyrimidine starvation due to low pyrE expression levels.

=> d 14 5

L4 ANSWER 5 OF 6 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

AN 1993:342544 BIOSIS

DN PREV199396039544

TI Glycosyl transferases of O-antigen biosynthesis in *Salmonella enterica*:

Identification and characterization of transferase genes of groups B, C2, and E1.  
AU Liu, Dan; Haase, Antje M.; Lindqvist, Lennart; Lindberg, Alf A.; Reeves, Peter R. (1)  
CS (1) Dep. Microbiol., University Sydney, Sydney, New South Wales 2006 Australia  
SO Journal of Bacteriology, (1993) Vol. 175, No. 11, pp. 3408-3413.  
ISSN: 0021-9193.  
DT Article  
LA English

=> d 14 4 ibib ab

L4 ANSWER 4 OF 6 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
ACCESSION NUMBER: 1997:281946 BIOSIS  
DOCUMENT NUMBER: PREV199799581149  
TITLE: Three novel \*\*\*rhamnosyl\*\*\* \*\*\*transferases\*\*\* involved in the assembly of *Pseudomonas aeruginosa* A-band polysaccharide.  
AUTHOR(S): Rocchetta, H. L.; Pacan, J. C.; Lam, J. S.  
CORPORATE SOURCE: Univ. Guelph, Guelph, ON Canada  
SOURCE: Abstracts of the General Meeting of the American Society for Microbiology, (1997) Vol. 97, No. 0, pp. 65.  
Meeting Info.: 97th General Meeting of the American Society for Microbiology Miami Beach, Florida, USA May 4-8, 1997  
ISSN: 1060-2011.  
DOCUMENT TYPE: Conference; Abstract; Conference  
LANGUAGE: English

=> s flavanone and glucoside and rhamnosyl(w)transferase

L5 4 FLAVANONE AND GLUCOSIDE AND RHAMNOSYL(W) TRANSFERASE

=> d 15 1-4 ibib ab

L5 ANSWER 1 OF 4 AGRICOLA  
ACCESSION NUMBER: 90:35392 AGRICOLA  
DOCUMENT NUMBER: IND90018006  
TITLE: \*\*\*Flavanone\*\*\* glycoside biosynthesis in citrus. Chalcone synthase, UDP-glucose: \*\*\*flavanone\*\*\* -7-O-glucosyl-transferase and - \*\*\*rhamnosyl\*\*\* - \*\*\*transferase\*\*\* activities in cell-free extracts.  
AUTHOR(S): Lewinsohn, E.; Britsch, L.; Mazur, Y.; Gressel, J.  
CORPORATE SOURCE: Washington State University, Pullman, WA  
AVAILABILITY: DNAL (450 P692)  
SOURCE: Plant physiology, Dec 1989. Vol. 91, No. 4. p. 1323-1328 ill  
Publisher: Rockville, Md. : American Society of Plant Physiologists.  
CODEN: PLPHAY; ISSN: 0032-0889  
NOTE: Includes references.  
DOCUMENT TYPE: Article  
FILE SEGMENT: U.S. Imprints not USDA, Experiment or Extension  
LANGUAGE: English  
AB Previous indirect evidence suggested that the biosynthesis of flavonoids in Citrus may not proceed via the usual chalcone synthase reaction and

that glycosylation occurs during chalcone formation and not afterward, as has been reported in other species. We detected chalcone-synthase and UDP-glucose: \*\*\*flavanone\*\*\* -7-O-glucosyl-transferase activities in cell-free extracts of Citrus. The glucosylated \*\*\*flavanone\*\*\* was further rhamnosylated when exogenous UDP-glucose and NADPH were added to the extract. Chalcone-synthase activity was detected in cell-free extracts derived from young leaves and fruits. Young fruits (2 millimeter diameter) had the highest chalcone synthase activity. UDP-glucose: \*\*\*flavanone\*\*\* -7-O-glucosyl-transferase activity was measured in cell-free extracts derived from young leaves and fruits of Citrus mitis and Citrus maxima. The highest UDP-glucose: \*\*\*flavanone\*\*\* -7-O-glucosyl-transferase activity was found in young C. maxima leaves. These data indicate that Citrus contains a flavonoid pathway similar to that studied in other species.

L5 ANSWER 2 OF 4 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
 ACCESSION NUMBER: 1990:48336 BIOSIS  
 DOCUMENT NUMBER: BA89:25700  
 TITLE: PRODUCTION OF \*\*\*FLAVANONE\*\*\* NEOHESPERIDOSIDES IN CITRUS EMBRYOS.  
 AUTHOR(S): GAVISH H; LEWINSOHN E; VARDI A; FLUHR R  
 CORPORATE SOURCE: DEP. PLANT GENETICS, WEIZMANN INST. SCI., REHOVOT 76100, ISRAEL.  
 SOURCE: PLANT CELL REP, (1989) 8 (7), 391-394.  
 CODEN: PCRPD8. ISSN: 0721-7714.

FILE SEGMENT: BA; OLD

LANGUAGE: English

AB Grapefruit (Citrus paradisi) tissue cultures were examined for qualitative and quantitative changes in \*\*\*flavanone\*\*\* -neohesperioidoside content during somatic embryogenesis. Embryos cultured in vitro contain naringin and a \*\*\*rhamnosyl\*\*\* - \*\*\*transferase\*\*\* activity which is capable of rhamnosylating position 2 on the \*\*\*flavanone\*\*\* \*\*\*glucosides\*\*\*. Rhamnosylation is carried out only in embryos cultivated on solid medium but not in embryos grown in suspension cell cultures.

L5 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:513780 CAPLUS  
 DOCUMENT NUMBER: 133:130794  
 TITLE: Protein and cDNA sequences of \*\*\*rhamnosyl\*\*\* \*\*\*transferase\*\*\* gene and uses thereof  
 INVENTOR(S): Gressel, Jonathan; Eyal, Yoram; Fluhr, Robert  
 PATENT ASSIGNEE(S): Yeda Research and Development Co. Ltd., Israel; State of Israel - Ministry of Agriculture  
 SOURCE: PCT Int. Appl., 48 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.    | KIND  | DATE     | APPLICATION NO. | DATE     |
|---------------|-------|----------|-----------------|----------|
| -----         | ----- | -----    | -----           | -----    |
| WO 2000043490 | A2    | 20000727 | WO 2000-IL38    | 20000120 |
| WO 2000043490 | A3    | 20000928 |                 |          |

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,

MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: IL 1999-128193 A 19990122

AB The invention provides protein and cDNA sequences of a novel Citrus \*\*\*rhamnosyl\*\*\* \*\*\*transferase\*\*\* gene responsible for producing the

bitter flavanoids naringin and neohesperidin, which encodes a protein having a \*\*\*flavanone\*\*\* -7-O- \*\*\*glucoside\*\*\* -2"-O- \*\*\*rhamnosyl\*\*\* - \*\*\*transferase\*\*\* catalytic activity. The invention

also relates to the uses of \*\*\*rhamnosyl\*\*\* \*\*\*transferase\*\*\* for modifying a rhamnose-1-6-glucose linkage of a chem. compd. to a rhamnose-1-2-glucose linkage. The invention further relates to genetically modified plants of the Citrus genus including sense or antisense construct which comprises the \*\*\*rhamnosyl\*\*\*

\*\*\*transferase\*\*\* gene or a gene knock-out integrated construct to provide less bitter grapefruits, pomelos and other citrus contg. bitter flavanoid glycosides.

L5 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1990:18915 CAPLUS

DOCUMENT NUMBER: 112:18915

TITLE: Production of \*\*\*flavanone\*\*\* neohesperidosides in Citrus embryos

AUTHOR(S): Gavish, Hanna; Lewinsohn, Efraim; Vardi, Aliza; Fluhr, Robert

CORPORATE SOURCE: Dep. Plant Genet., Weizmann Inst. Sci., Rehovot, 76100, Israel

SOURCE: Plant Cell Reports (1989), 8(7), 391-4  
CODEN: PCRPD8; ISSN: 0721-7714

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Grapefruit (Citrus paradisi) tissue cultures were examd. for qual. and quant. changes in \*\*\*flavanone\*\*\* -neohesperidoside content during somatic embryogenesis. Embryos cultured in vitro contain naringin and a \*\*\*rhamnosyl\*\*\* - \*\*\*transferase\*\*\* activity which is capable of rhamnosylating position 2 on the \*\*\*flavanone\*\*\* \*\*\*glucosides\*\*\*. Rhamnosylation is carried out only in embryos cultivated on solid medium, but not in embryos grown in suspension cell cultures.

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